CLAIMS

1. A method comprising:

receiving input text entered by a user;

converting the input text to an output text; and

displaying the input text and the output text within a common entry line.

2. A method as recited in claim 1, wherein the input text comprises a phonetic text and the output text comprises a character-based language text.

3. A method as recited in claim 1, wherein the input text comprises Chinese Pinyin and the output text comprises Chinese Hanzi.

4. A method as recited in claim 1, wherein the displaying comprises displaying the input text and the output text together within a common horizontal line.

5. A method as recited in claim 1, wherein the displaying comprises depicting the output text in place of the input text from which the output text was converted.

6. A method as recited in claim 1, further comprising modifying the output text as additional input text is entered.

7.   A method as recited in claim 6, further comprising ceasing to further modify the output text as additional input text is entered in response to user entry of punctuation.

8.   A method as recited in claim 6, further comprising ceasing to further modify the output text as additional input text is entered in response to user confirmation of the output text.

9.   A method as recited in claim 6, further comprising ceasing, in response to user confirmation of the output text, to modify the output text while leaving unconverted input text active for modification.

10.   A method as recited in claim 1, further comprising selectively modifying the output text as additional input text is entered such that no modification is made if such modification results in only a minor improvement.

11.   A method as recited in claim 1, further comprising enabling a user to edit the output text within the common entry line without switching from an entry mode to an edit mode.

12.   A method as recited in claim 1, further comprising, in response to user selection of output text for editing, depicting an edit window adjacent to the selected output text in the entry line.

13. A method as recited in claim 12, wherein the entry line is oriented in a first direction and further comprising orienting the edit window in a second direction orthogonal to the first direction.

14. A method as recited in claim 1, further comprising, in response to user selection of output text for editing, depicting an input text hint window adjacent to the selected output text in the entry line, the input text hint window containing the input text from which the selected output text was converted.

15. A method as recited in claim 1, further comprising, in response to user selection of output text for editing, depicting a first candidate list adjacent to the selected output text in the entry line, the first candidate list containing one or more alternate output text candidates that may be substituted for the selected output text.

16. A method as recited in claim 15, further comprising ordering the output text candidates within the first candidate list according to a ranking.

17. A method as recited in claim 15, wherein the first candidate list is scrollable, and further comprising animating movement of the output text candidates as the list is scrolled.

18.   A method as recited in claim 15, further comprising depicting a second candidate list containing a complete set of output text candidates than the first candidate list.

19.   A method as recited in claim 18, further comprising arranging the output text candidates in the second candidate list according to complexity of character construction.

20.   A method as recited in claim 18, further comprising:

ordering the output text candidates in the first candidate list according to a first metric; and

arranging the output text candidates in the second candidate list according to a second metric different than the first metric.

21.   A method as recited in claim 1, wherein the entry line is oriented in a first direction, and further comprising, in response to user selection of output text for editing:

depicting an input text hint window above the selected output text in a second direction orthogonal to the first direction, the input text hint window containing the input text from which the selected output text was converted; and

depicting a first candidate window below the selected output text in the second direction, the first candidate window containing one or more alternate output text candidates that may be substituted for the selected output text.

22.   A method as recited in claim 1, wherein the input text comprises phonetic and non-phonetic text, further comprising:

converting the phonetic text to language text; and

displaying the language text, the non-phonetic text, and newly entered phonetic text within the common entry line.

23.   A method as recited in claim 1, further comprising enabling a user to enter input text containing at least two languages without switching from a first entry mode for a first language and a second entry mode for a second language.

24.   A method as recited in claim 1, wherein the input text comprises individual input characters, further comprising converting at least one of the input characters to the output text when at least one input character is displayed and at most six input characters are displayed.

25.   A method as recited in claim 1, wherein the input text comprises individual input characters, further comprising:

evaluating at least two conversion candidates for matching characters; and

if at least one character from both conversion candidates match, converting at least one input character to the matching character.

26.   A method as recited in claim 1, wherein the input text comprises individual input characters, further comprising always displaying a most recently entered input character.

27. A method as recited in claim 1, wherein the input text comprises individual input characters, further comprising converting at least one input character to the output text of a first most likely conversion candidate if the first most likely conversion candidate scores significantly higher than a second most likely conversion candidate.

28. One or more computer-readable media having computer-executable instructions that, when executed on a processor, direct a computer to perform the method as recited in claim 1.

29. A method comprising:

displaying phonetic text as a user enters the phonetic text; and

displaying language text upon conversion from the phonetic text, the language text being presented in place of the phonetic text from which the language text is converted so that the language text and any unconverted phonetic text are displayed together.

30. A method as recited in claim 29, wherein the phonetic text comprises a Chinese Pinyin and the language text comprises a Chinese Hanzi.

31. A method as recited in claim 29, further comprising displaying the unconverted phonetic text and the language text together within a common horizontal line.

32.   A method as recited in claim 29, further comprising modifying the language text as additional phonetic text is entered.

33.   A method as recited in claim 32, further comprising ceasing to further modify the language text as additional phonetic text is entered in response to user entry of punctuation.

34.   A method as recited in claim 32, further comprising ceasing to further modify the language text as additional phonetic text is entered in response to user confirmation of the language text.

35.   A method as recited in claim 32, further comprising ceasing, in response to user confirmation of the language text, to modify the language text while leaving unconverted phonetic text active for modification.

36.   A method as recited in claim 29, further comprising modifying the language text to second language text as additional phonetic text is entered if the second language text is significantly more likely to have been intended.

37.   A method as recited in claim 29, further comprising enabling a user to edit the language text without switching from an entry mode to an edit mode.

38. A method as recited in claim 29, further comprising, in response to user selection of language text for editing, displaying an edit window adjacent to the selected language text.

39. A method as recited in claim 29, further comprising, in response to user selection of language text for editing:

displaying a phonetic text hint proximal to the selected language text, the phonetic text hint containing the phonetic text from which the selected language text was converted; and

displaying a reduced-set candidate list proximal to the selected language text, the candidate list containing a reduced set of one or more alternate language text candidates that may be substituted for the selected language text.

40. A method as recited in claim 39, further comprising ordering the language text candidates within the candidate list according to a ranking.

41. A method as recited in claim 39, wherein the candidate list is scrollable, and further comprising animating movement of the language text candidates as the list is scrolled.

42. A method as recited in claim 39, further comprising displaying a full-set candidate list containing a complete set of language text candidates than the reduced-set candidate list.

43. A method as recited in claim 42, further comprising arranging the language text candidates in the full-set candidate list according to complexity of character construction.

44. A method as recited in claim 42, further comprising:

ordering the language text candidates in the reduced-set candidate list according to a first metric; and

arranging the language text candidates in the full-set candidate list according to a second metric different than the first metric.

45. A method as recited in claim 29, wherein the phonetic text comprises individual characters, further comprising converting at least one of the phonetic characters to the language text when at least one phonetic character is displayed and at most six phonetic characters are displayed.

46. One or more computer-readable media having computer-executable instructions that, when executed on a processor, direct a computer to perform the method as recited in claim 29.

47. A method comprising:

presenting a user interface to receive phonetic text and non-phonetic text entered by a user;

converting the phonetic text to a language text; and

displaying together the language text, the non-phonetic text, and unconverted phonetic text.

48.   A method as recited in claim 47, further comprising displaying the language text, the non-phonetic text, and the unconverted phonetic text in-line within a common horizontal line.

49.   A method as recited in claim 47, further comprising displaying the non-phonetic text differently than the unconverted phonetic text so that the non-phonetic text appears differently than the unconverted phonetic text.

50.   A method as recited in claim 47, further comprising displaying the non-phonetic text in a first font and the unconverted phonetic text in a second font different from the first font.

51.   A method as recited in claim 47, further comprising displaying the non-phonetic text in a first color and the unconverted phonetic text in a second color different from the first color.

52.   One or more computer-readable media having computer-executable instructions that, when executed on a processor, direct a computer to perform the method as recited in claim 47.

53.   A language input user interface comprising:

a line-based entry area;

an input text displayed within the line-based entry area; and

an output text, converted from the input text, displayed together with unconverted input text within the line-based entry area.

54.   A language input user interface as recited in claim 53, wherein the input text comprises a phonetic text and the output text comprises a character-based language text.

55.   A language input user interface as recited in claim 53, wherein the input text comprises Chinese Pinyin and the output text comprises Chinese Hanzi.

56.   A language input user interface as recited in claim 53, wherein the line-based entry area is oriented horizontally.

57.   A language input user interface as recited in claim 53, wherein the output text replaces the input text from which the output text was converted.

58.   A language input user interface as recited in claim 53, wherein the output text is further modified as additional input text is entered.

59.   A language input user interface as recited in claim 53, wherein the output text is rendered fixed in response to user entry of punctuation.

60.   A language input user interface as recited in claim 53, wherein the output text is rendered fixed in response to user confirmation of the output text.

61. A language input user interface as recited in claim 53, further comprising editing means for editing the output text within the line-based entry area without switching from an entry mode to an edit mode.

62. A language input user interface as recited in claim 53, further comprising an edit window, invokable by a user, positioned adjacent to particular output text to be edited.

63. A language input user interface as recited in claim 53, wherein the line-based entry area is oriented in a first direction and further comprising an edit window positioned adjacent to the line-based entry area and oriented in a second direction orthogonal to the first direction.

64. A language input user interface as recited in claim 53, further comprising an input text hint, invokable by a user, positioned adjacent to line-based entry area near selected output text to be edited, the input text hint window containing the input text from which the selected output text was converted.

65. A language input user interface as recited in claim 53, further comprising a candidate list, invokable by a user, positioned adjacent to line-based entry area near selected output text to be edited, the candidate list containing one or more alternate output text candidates that may be substituted for the selected output text.

66.   A language input user interface as recited in claim 65, wherein the output text candidates are ordered within the candidate list according to a ranking.

67.   A language input user interface as recited in claim 65, wherein the candidate list is scrollable and the output candidates are animated during scrolling.

68.   A language input user interface as recited in claim 53, further comprising:

first and second candidate lists invokable by a user;

the first candidate list containing one or more alternate output text candidates that may be substituted for the selected output text; and

the second candidate list containing a complete set of output text candidates than the first candidate list.

69.   A language input user interface as recited in claim 68, wherein the output text candidates in the second candidate list are arranged according to complexity of character construction.

70.   A language input user interface as recited in claim 68, wherein the output text candidates are ordered within the first candidate list according to a first metric and the output text candidates are arranged in the second candidate list according to a second metric different than the first metric.

71. A language input user interface as recited in claim 53, wherein the line-based entry area is oriented in a first direction, and further comprising:

an input text hint positioned above the line-based entry area near selected output text to be edited and oriented in a second direction orthogonal to the first direction, the input text hint containing the input text from which the selected output text was converted; and

a candidate list positioned below the line-based entry area near the selected output text to be edited, the candidate list containing one or more alternate output text candidates that may be substituted for the selected output text.

72. A language input user interface as recited in claim 53, wherein the input text contains phonetic and non-phonetic text and the output text, phonetic input text and non-phonetic input text are displayed together within the line-based entry area.

73. A word processor comprising the language input user interface as recited in claim 53.

74. A language input architecture comprising:

a user interface to enable a user to enter an input text;

a language conversion unit to convert the input text to an output text; and

the user interface being configured to display the converted output text in-line with unconverted input text.

75. A language input architecture as recited in claim 74, wherein the input text comprises a phonetic text and the output text comprises a character-based language text.

76. A language input architecture as recited in claim 74, wherein the input text comprises Chinese Pinyin and the output text comprises Chinese Hanzi.

77. A language input architecture as recited in claim 74, wherein the user interface presents the output text and unconverted input text within a common horizontal line.

78. A language input architecture as recited in claim 74, wherein the language conversion unit continues to modify the output text as additional input text is entered, the user interface changing the output text as the output text is modified.

79. A language input architecture as recited in claim 74, wherein the user interface enables a user to edit the output text without switching from an entry mode to an edit mode.

80. A language input architecture as recited in claim 74, wherein the user interface presents the output text and unconverted input text within a common line oriented in a first direction and further presents an edit window near selected output text to be edited, the edit window being oriented in a second direction orthogonal to the first direction.

81. A language input architecture as recited in claim 74, wherein the user interface presents an input text hint containing the input text from which the selected output text was converted.

82. A language input architecture as recited in claim 74, wherein the user interface presents a candidate list containing one or more alternate output text candidates that may be substituted for the selected output text.

83. A language input architecture as recited in claim 74, wherein the user interface presents first and second candidate lists, the first candidate list containing one or more alternate output text candidates that may be substituted for the selected output text and the second candidate list containing a complete set of output text candidates than the first candidate list.

84. A language input architecture as recited in claim 74, wherein the input text contains phonetic and non-phonetic text, further comprising:

the language conversion unit is configured to convert the phonetic text to language text while leaving the non-phonetic text unconverted; and

the user interface is configured to display the language text, unconverted phonetic text, and the non-phonetic text in-line with one another.

85.   A word processor comprising the language input architecture as recited in claim 74,.

86.   A language input architecture comprising:

a typing model to receive an input string written in a phonetic text and determine a typing error probability of how likely a candidate string was incorrectly entered as the input string;

a language model to determine a language text probability of how likely a string written in a language text represents the candidate string;

a search engine to selectively convert the input string of phonetic text to the string of language text based on the typing error probability and the language text probability; and

a user interface to display the phonetic text and the language text within a common line.

87.   One or more computer-readable media having computer-executable instructions that, when executed on a processor, direct a computer to:

receive an input string of phonetic text;

convert the input string of phonetic text to an output string of language text; and

display the language text and unconverted phonetic text in-line together within a line-based entry area.

88.   One or more computer-readable media having computer-executable instructions that, when executed on a processor, direct a computer to:

receive an input string of phonetic text and non-phonetic text;

convert the phonetic text to language text; and

display the language text, non-phonetic text, and unconverted phonetic text in-line together within a line-based entry area.